Goal Performance Table

Target Codes:	SP = Strategic Plan Key measures	TBD = Targets have not yet been developed	
	PART = PART Measure	UNK = Prior year data unavailable	
	BUR = Bureau specific measure	NA = Long-term targets are inappropriate to determine at this time	
Type Codes:	C = Cumulative Measure	A = Annual Measure	F = Future Measure

End Outcome Goal 1.4: Improve the understanding of National Ecosystems and Resources through Integrated Interdisciplinary assessment.

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
End Outcome Measures										
% of targeted science products that are used by partners or customers for land or resource decision making **(SP)**	A	90%	93%	93%	≥90%	93%	≥90%	≥90%	0	≥90%
Intermediate Outcome Measures and Bureau and Outcome Measures **Ensure availability of long-term environmental and natural resource information, data and systematic analyses needed by land and resource managers for informed decision making**										
% of North American migratory birds for which scientific information on their status and trends are available **(SP) (BRM)**	A	26%	26%	26.6% (173/650)	26.6% (173/650)	26.6% (173/650)	26.6% (173/650)	26.6% (173/650)	0	27.1% (176/650)
X% of focal migratory bird populations for which scientific information is available to support resource management decisionmaking (USGS in coordination with FWS) **(BRM)**	A	UNK	56.88%	57.02%	57.16%	55.18%	55.22%	55.23%	+0.01%	55.28%
Comment	This performance measure is shared with the FWS. Changes are due to advances in knowledge through research on bird species identified by the FWS. Program performance is measured by quantifying contributions to science related to these species.									

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% of focal migratory bird populations for which species pages are available through the NBII **(BIMD)**	A	UNK	UNK	8%	15%	15%	22%	29%	+7%	51%
% of targeted fish and aquatic populations for which information is available regarding limiting factors **(SP) (BRM)**	A	31%	31%	38.66% (46/119)	41% (49/119)	41% (49/119)	41% (49/119)	41% (49/119)	0	43% (51/119)
% of targeted invasive species for which scientific information and decision support models are available to improve early detection (including risk assessments) and invasive species management **(SP) (BRM)**	A	51.6%	51.6%	54% (3.25/6)	54% (3.25/6)	54% (3.25/6)	54% (3.25/6)	54% (3.25/6)	0	54% (3.25/6)
X% improvement in detectability limits for selected, high priority environmentally available chemical analytes **(BRM)**	A	UNK	6%	12%	19%	19%	26%	33%	+7%	40%
Comment	Detectibility limits will be improved through development of ultraclean procedures with higher-quality reagents.									
% of complete historical bird banding records available electronically	A					0	0	0	0	0
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
Increase long-term trend precision (decrease bias) for existing species monitored through the Breeding Bird Survey to enable a detection of 50% population decline of relevant species within 20 years **(BRM)**	A	UNK	0.008	0.008	0.008	0.008	0.008	0.008	0	0.008

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
X% of CRU students that work on subsequent fish and wildlife science advance degrees or obtain employment in the fish and wildlife or other natural resources field, within targeted dates post-graduation **(CRU)**	A	UNK	95%	95%	95%	95%	95%	95%	0	95%
X% of US land with land characterization and species distribution information available for resource management decision-making updated in the last 5 years **(BIMD)**	C	23.3%	42.3%	34%	36.4%	37%	40%	65%	+25%	65%
% US federally listed threatened and endangered fish species for which species profiles, occurrence data and maps are available through the NBII **(BIMD)**	C	UNK	UNK	17.5%	20% (28/138)	20% (28/138)	20% (28/138)	20% (28/138)	0	23% (32/138)
X% of North American amphibians and reptiles for which scientific information on their status (species distribution) are available in a standardized and exchangeable format, to improve conservation plans of federal and state agencies **(BIMD)**	C	90% (558/620)	91% (564/620)	92% (570/620)	93% (576/620)	93% (576/620)	93% (576/620)	93% (576/620)	0	93% (576/620)

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
X% of North American mammals for which scientific information on their status (species distribution) are available in a standardized and exchangeable format, to improve conservation plans of federal and state agencies **(BIMD)**	C	93% (434/467)	94% (439/467)	94% (439/467)	95% (444/467)	95% (444/467)	95% (444/467)	95% (444/467)	0	95% (444/467)
X% of the Nation's 65 principal aquifers with monitoring wells used to measure responses of water levels to drought and climatic variations to provide information needed for water-supply decisionmaking **(SP) (WRD)**	C	61%	61%	60% (39/65)	60% (39/65)	58% (38/65)	62% (40/65)	62% (40/65)	0%	62% (40/65)
Comment	The decrease in 2007 is the result of a decrease in funding to the Cooperative Water Program. Level performance continues in 2008 with a slight increase in performance anticipated for 2009. It is important to note that due to the current economic downturn, States are finding it more and more difficult to meet existing commitments. Therefore, these numbers might actually decrease even though USGS funding has held steady. USGS is hopeful the target for 2009 will be maintained in 2010.									
X% of targeted contaminants for which methods are developed to assess potential environmental and human health significance **(SP) (WRD)**	C	20%	85%	41% (78/188)	33% (76/232)	48% (138/287)	33% (76/232)	33% (76/230)	0	33% (Determined annually)
Comment	The target list (denominator) for this performance measure is redefined each year based on the chemicals for which methods were developed in the previous year and additional chemicals that are added based on current priorities. The annual target of 33% of the annual list assures that significant progress toward measuring new and understudied environmental contaminants is achieved each year. The list of chemicals for which methods will be developed in 2010 will be defined in September 2009 following a reassessment of priorities and accumulation of input from other agencies.									
X% of streamflow stations with real-time measurement/ reporting of water quality **(WRD)**	C	7% (520/7451)	9%	11% (820/7451)	11% (826/7508)	11.6% (787/7551)	11.9% (901/7551)	12% (910/7551)	+0.1%	12.4% (937/7551)

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
X% of U.S. with ground water quality status and trends information to support resource management decisions **(WRD)**	C	39%	58%	68%	70%	76%	80%	85%	+5%	100%
X% of States with web based Streamflow statistics tools to support water management decisions **(WRD)**	C	10% (5/50)	14% (7/50)	18% (9/50)	26% (13/50)	28% (14/50)	34% (17/50)	34% (17/50)	0	40% (20/50)
Comment	See *http://water.usgs.gov/osw/streamstats/ssonline.html* for current national status.									
X% of river basins that have streamflow stations **(SP) (WRD)**	C	82% (1825/ 2223)	81% (1800/ 2223)	81% (1800/ 2223)	84% (1870/ 2223)	79% (1765/ 2223)	84% (1765/ 2102)	86% (1800/ 2102)	+2%	88% (1850/ 2102)
Total Actual/Projected cost streamgage (national average) ($000)		**23,725**	**24,300**	**24,300**	**26,180**	**24,710**	**26,475**	**27,732**	**+1,257**	**30,525**
Actual/Projected cost per streamgage (national average) (whole dollars)		**13,500**	**13,500**	**13,500**	**14,000**	**14,000**	**14,500**	**15,000**	**+500**	**16,500**
Comment	The measure "% of river basins that have streamflow information" assumes a single streamgage in each basin, where 2,102 basins are defined nationwide by 8-digit hydrologic unit codes; however, many basins require more than one streamgage to accurately assess conditions. This metric may never attain 100% because not all basins may require streamflow data (e.g., a basin with no population may not require any assessment of flood risk or land use changes). For 2009, the target was re-baselined to reflect the number of HUC units in the continental United States to provide for greater accuracy in reporting. It is possible that some decline in performance from that estimated from 2009 to 2010 may occur due to State and local funding partners budget issues; however, it is anticipated that USGS Water Science Centers will attempt to hold streamgage operation and maintenance costs level by controlling costs, within their Centers in order to maintain the stability of the streamgage network. It is important to note that any anticipated loss of streamgages may be exacerbated by the fact that the U.S. Army Corps of Engineers expects that funding for approximately 50 cooperatively funded streamgages in NY, MD, and PA will be discontinued in 2009 and additional streamgages discontinued in 2010. Although there is no increase in performance depicted in the table for NSIP performance measures, the $2M increase to NSIP provided in 2009 allows USGS to help stabilize the streamgage network. Because of budget constraints at the State and local government level, as well as other Federal agencies, the streamgage network in many States has experienced a decline in cooperator funding. This NSIP increase has provided additional funds to Water Science Centers for the operation and maintenance of threatened streamgages.									

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% improvement in accuracy of watershed (SPARROW) model prediction for total nitrogen and total phosphorus (measured as reduced error) **(WRD)**	C	31%	24%	20%	20%	20%	20%	20%	0	20%
X% of ground-water stations that have real-time reporting capability in the ground water climate response network **(WRD)**	C	67% (233/347)	47%	52% (181/347)	53% (290/544)	54% (290/544)	54% (324/598)	54% (324/598)	0%	54% (324/598)
Comment	During 2006 and 2007, the network in total grew more than the number of wells reporting real-time because funding partners opted to fund more non-real-time stations. As a result, the relative proportion of the network that is reporting real-time declined. Real-time measurement continues to grow in the USGS-funded portion of the network. The numerator represents the number of ground-water stations with real-time reporting capacity within the network while the denominator represents the total number of sites within the climate response network. The USGS has requested to redefine this measure. As noted in the 2006 and 2007 year-end reports, overall expansion of the network can result in a decrease in the performance metric because not all of the new wells added to the network are real-time. In 2008, the network was expanded to include both Federal and cooperatively funded wells to make a larger climate network; as a result of that change the denominator has changed. The mixture or wells that make up the network as well as the total number of wells in the network will continue to change over time. Therefore, the percentages for 2009 and 2010 are expected to change slightly while the number of wells tallied to compute those percentages could change significantly. The refined measure was proposed and approved and will, beginning in 2011, more accurately measure the USGS performance of the climate response network.									
% of U.S. with streamwater quality data for status and trends assessment and information to support resource management decisions **(WRD)**	C	UNK	UNK	16.6%	UNK	33.4%	49.8%	66.8%	+17%	100%
Discontinued streamgages, cableways, and ground-water well remediated	A					0	0	0	0	0
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
# of streamgages upgraded with high data rate radios to increase frequency of radio transmission	C					4,500	4,900	5,300	+400	6,500
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
% of discharge measurements made with hydroacoustic instruments	C					35%	40%	45%	+5%	70%
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
X% of U.S. with ground water availability status and trends information to support resource management decisions **(WRD)**	C	7% (4.5/65)	8% (5.5/65)	9% (6/65)	11% (7/65)	11% (7/65)	12% (8/65)	14% (9/65)	+2%	18% (12/65)
Total Actual/Project cost ground water status ($000)		**1,575**	**1,925**	**2,100**	**2,625**	**2,625**	**3,280**	**4,050**	**770**	**6,000**
Actual/Projected cost per ground water status (whole dollars)		**350,000**	**350,000**	**350,000**	**375,000**	**375,000**	**410,000**	**450,000**	**40,000**	**500,000**
Comment	Regional studies in 2007 included Carolina Coastal Plain, Denver Basin, Central Valley, Michigan Drainage Basin, Mississippi Embayment, and Basin and Range carbonate aquifers. Changes reflect the addition of one new study area in 2008 (Columbia Plateau), one in 2009 (High Plains), and another in 2010 (Floridan). The average cost per study varies depending on the scope and complexity of the studies being conducted in any given year. Initially, studies were smaller in scope resulting in a smaller average cost per study. Over time, the scope of studies has expanded requiring more funding per study. Measure indicates the number of regional ground-water evaluation projects (status and trends in ground-water availability) that coincide with the Nation's 65 principal aquifers, as designated in the National Atlas. Average cost per project is $450,000, though actual costs can range from <$300,000 to >$600,000 per project per year, depending on the scope and complexity of the study. Project costs include salaries, travel, training, vehicles, supplies, report production, and printing.									
% of proposed streamflow stations currently in operation that meet one or more federal needs **(WRD)**	C	61% (2700/ 4425)	62% (2742/ 4425)	62% (2742/ 4425)	64% (2845/ 4425)	62% (2940/ 4744)	62% (2940/ 4744)	63% (2990/ 4744)	+1%	65% (3100/ 4744)
Total Actual/Project cost streamflow stations ($000)		**35,100**	**36,450**	**37,017**	**39,830**	**41,160**	**42,630**	**44,850**	**+2,220**	**51,150**

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Actual/Projected cost per streamflow stations (whole dollars)		**13,000**	**13,293**	**13,500**	**14,000**	**14,000**	**14,500**	**15,000**	**+500**	**16,500**
Comment	The change in 2008 was a result of the increase for NSIP streamgage operations and the increases for Hazards Assessment and Mitigation. The number of streamgages and the number of those gages that meet Federal needs can fluctuate from year to year as streamgage funding is a cooperative endeavor with numerous Federal and non-Federal partners. During 2008 the denominator was re-baselined due to the reevaluation of requirements for the national network based on comments from external review by the National Research Council and changes to USGS water quality networks. This baseline increase of 319 streamgages makes the changes in 2009 and 2010 more difficult to assess, but the number of streamgages that will likely decrease is the best estimate available. This performance measure is very sensitive to losses of streamgages from the network. Streamgages identified to be fully funded by NSIP are sometimes targeted by funding partners to lose cooperative funds with the assumption that NSIP will replace the lost funds. There is a possibility that the number of streamgages losses could be less than estimated here for 2010. It is important to note that any anticipated loss of streamgages may be exacerbated by the fact that the U.S. Army Corps of Engineers expects that funding for approximately 50 cooperatively funded streamgages in NY, MD, and PA will be discontinued in 2009 and at least that number in 2010. Although there is no increase in performance depicted in the table for NSIP performance measures, the $2M increase to NSIP provided in 2009 allows USGS to help stabilize the streamgage network. Because of budget constraints at the State and local government level, as well as other Federal agencies, the streamgage network in many States has experienced a decline in cooperator funding. This NSIP increase has provided additional funds to Water Science Centers for the operation and maintenance of threatened streamgages.									
% of surface area of the conterminous U.S. for which high-resolution geospatial datasets are cataloged, managed, and available through *The National Map* **(SP) (NGP)**	C	UNK	UNK	99.71% (698/700)	100% (700/700)	99.86% (699/700)	99.86% (699/700)	100% (700/700)	0	100% (700/700)
Comment	The National Geospatial Program continues to maintain the geospatial data layers over the conterminous US. There are 7 data layers to maintain.									
Square miles of the US with updated high resolution elevation data **(NGP)**	A					93,153	58,000	58,000	0	50,000
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget. Not a cumulative measure.									
Square miles of the US with high resolution, leaf off, <1m imagery data **(NGP)**	A					79,751	75,000	200,000	*+125,000	75,000
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget. *Increase due to National Geospatial Intelligence Agency (NGIA) Border Program. Not a cumulative measure.									

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% of total cost FSA and USGS saved through partnering with other entities for imagery acquisition of 1-meter NAIP orthoimagery **(NGP)**	A	44% (3.23/7.35)	41% (4.43/10.8)	32% (2.3/7.2)	36% (5.0/14.0)	27%	36% (5.0/14.0)	40% (5.6/14)	+4%	40% (5.6/14)
Comment	The USGS expects an increase of FSA-contributed funds in 2009 and 2010 over the 2008 level.									
% of data acquisition costs for *The National Map* funded by partners **(NGP)**	C	47%	74%	59.3% (11.9/20)	60% (12/20)	71% (14/20)	60% (12/20)	71% (14/20)	+11%	71% (14/20)
Comment	Numerator is the total funds contributed by partners; the denominator is the total funds used to purchase data. The USGS expects partner funding to remain at the 2008 level.									
% of time that USGS managed geospatial data and information dissemination systems (i.e., Geospatial One-Stop Portal, *The National Map*, NSDI Clearinghouses) are accessible online to customers **(NGP)**	C	UNK	UNK	UNK	Baseline	97%	97%	98%	+1%	99%
Comment	NGP will monitor, log, and summarize the NGP geospatial data dissemination IT systems' accessibility times. The time will be the average for these systems divided by 24x7x365. The systems' availability will be reliant on the Department's Enterprise Services Network. In 2008 USGS baselined the number to enable the bureau to establish a realistic projection of the online availability of USGS databases and applications such as The National Map. There were several DOI Enterprise Services Network system outages across the country during August and September 2008.									
% of customers that identify or indicate (via a survey) that USGS NGP Outreach materials and activities (information and publications, conferences, training and workshops) met their needs/ requirements **(NGP)**	C	UNK	UNK	UNK	Baseline	20%	20%	30%	+10%	75%
Comment	In 2008, this measure was baselined to determine the number of customers. The percent of customers is expected to increase in 2010 based on 2009 results.									

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% of GIO partners reporting satisfaction with partnership agreements **(NGP)**	C	UNK	UNK	UNK	Baseline	75%	75%	80%	+5%	90%
% of total cost of geospatial data and geospatial services saved through Geospatial Line of Business Joint Business Case **(NGP)**		UNK	UNK	UNK	UNK	UNK	Baseline	TBD	TBD	TBD
Comment	The OMB Geospatial Line of business is a cross-government project that is standardizing and consolidating geospatial data and services across the Federal government. The Geospatial SmartBuy Agreement, issued by the General Services Administration on March 6, 2009, will be awarded and contracts available in mid-May 2009. 2009 is the baseline year.									
% of US surface area with contemporary land cover data needed for major environmental monitoring and assessment programs **(SP) (Geography)**	C	65%	94%	95% (286/300)	100% (300/300)	99.3% (298/300)	40% (120/300)	100% (463/463)	+60%	40% (120/300)
Comment	In 2009, USGS will begin the next generation land cover dataset. Efforts in 2010 will focus on completing the 2006 NLCD product for the conterminous U.S. only. These areas will be included in the next NLDC updated product of 2011.									
X% of data accessible: X% of satellite data available from archive within 24 hours of capture **(Geography)**	C	97.2%	98.7%	95% (285/300)	95% (285/300)	95% (285/300)	95% (285/300)	100% (300/300)	+5%	100% (300/300)
Total Actual/Projected Cost scene ($000)		**43,725**	**40,159**	**40,962**	**40,962**	**40,962**	**40,159**	**40,159**	**0**	**40,159**
Actual/Projected Cost per scene (whole dollars)		**14.64**	**14.64**	**14.64**	**14.64**	**14.64**	**14.64**	**14.64**	**0**	**14.64**
Comment	Measures the percent of scenes captured and made available to users within 24 hours (numerator is the number of scenes available (300 in 2010) and denominator is the number of scenes collected (300) every 24 hours.									

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% of surface area with temporal and spatial monitoring, research, and assessment/data coverage to meet land use planning and monitoring requirements (# of completed eco-region assessments out of a total of 84 eco-regions) **(Global Change)**	C	37%	48%	61% (51/84)	69% (58/84)	71% (60/84)	86% (72/84)	100% (84/84)	+14%	Measure completed in 2010.
% of surface area with temporal and spatial research and modeling and assessment/data coverage to meet targeted fish and wildlife adaptation planning and adaptive management requirements (NCCWSC) (# of completed down-scaled global models to regional scales out of a total of 12 regional flora and fauna climate change adaptation models and forecasts.		UNK	UNK	UNK	UNK	60% (3/5)	60% (6/10)	83% (25/30)	+23%	+10%
X% of US with regional geologic map coverage that is available to customers through the NGMDB	C	53%	55%	60.4%	63%	64.6%	65%	67%	+2%	73%
Total Actual/Projected Cost square mile ($000)					**23,460**	**23,460**	**23,460**	**23,460**	**0**	
Actual/Projected Cost per Square Mile (whole dollars)					**1,750**	**1,750**	**1,750**	**1,750**	**0**	
Comment	The percentages shown above are calculated by dividing the coverage (maps published) within last year by square miles of the U.S. which is 3.7 million square miles.									

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
X% of geologic investigations in National Park Service (NPS) units that are cited for use by the NPS within three years of delivery **(NCGM)**	A	80%	80%	100%	80%	92%	80%	80%	0	80%
Comment	The percentages shown above are calculated by dividing the # of pubs used by NPS within 3 years by the total # of pubs produced for NPS. An 80% target was chosen in consultation with OMB as a target for customer use of USGS investigations.									
X% of EDMAP students that work on subsequent geoscience degrees or obtain a job in a geoscience field **(NCGM)**	A	94%	95%	94%	95%	100%	95%	95%	0	95%
Comment	The percentages shown above are calculated by dividing the EDMAP trained students (grant recipients) who went on in geoscience fields (education or employment) by the number of students able to be reached within 4 years after their training to confirm status. Of those trained, most have stayed in the geosciences. The resulting consistently high percentage is an indication that the training / mentoring provided by the program is effective.									
X% of U.S. with geologic maps that are being integrated into ground-water availability status and trends to support resource management decisions **(NCGM)**	A	5%	6%	8%	10%	12%	11%	12%	+1%	15%
Comment	The percentages shown above are calculated by dividing the number of aquifers with completed geologic mapping by the number of principal aquifers, which is 65. 2008 Plan reflects program growth.									
# of counties or comparable jurisdictions that have adopted hazard mitigation measures based in part on geologic mapping and research **(NCGM)**	A	10	12	14	14	17	15	15	0	16

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% of NPS units for which environmental characterization based on airborne remote sensing is provided as digital GIS products and for which products are cited or use by NPS within 2 years **(C&M)**	C	50% (6/12)	50% (7/14)	60% (10/16)	75% (12/16)	75% (12/16)	75% (12/16)	80% (19/24)	+5%	85%
% of regional and major topical studies for which interpretive and synthesis products are cited by identified partners and users within 3 years of study completion **(C&M)**	C	80% (23/29)	80% (24/30)	80% (25/32)	80% (26/32)	80% (26/32)	80% (25/31)	80% (26/32)	0	80%
Intermediate Outcome Measures and Bureau and Outcome Measures **Ensure the quality and relevance of science information and data to support decision making**										
% of studies validated through appropriate peer review **(SP)**	A	100% (2127/ 2127)	100% (2157/ 2157)	100% (2879/ 2879)	100% (2530/ 2530)	100% (5513/ 5513)	100% (4436/ 4436)	100% (3007/ 3007)	0	100% (3104/ 3104)
% satisfaction with scientific and technical products and assistance **(SP)**	A	96%	91%	90%	≥90%	93%	≥90%	≥90%	0	≥90%
Efficiency and Other Output Measures										
Average cost per sample for selected, high priority environmentally available chemical analytes **(BRM)**	A	$700	$680	$680	$650	$660	$640	$621	-$19	$600
Actual/Projected Cost per sample (whole dollars)		**700**	**680**	**680**	**650**	**660**	**640**	**621**	**-19**	**600**
Comment	Average cost per sample decrease as a result of developing new methods for analysis, adoption of computerized chromatographic or other automated techniques, and improvements in instrumentation. Increase is partially offset by increased costs of reagent chemicals for analyses due to increases in costs of manufacturing petrochemical products and costs of shipping.									
# of gigabytes collected annually **(Total)**	A	6,140.8	76,768.8	96,337.8	24,554.8	134,138.8	145,009.8	129,502.8	-15,507	129,502.8
# of gigabytes managed and distributed cumulatively **(Total)**	C	109,842	190,210.8	282,347.6	253,660.4	414,880.4	559,827.2	689,570.0	+129,742.8	1,078,225.6

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
# of terabytes collected annually **(Geography)**	A	438.8	537.9	96	278	535.2	270	270	0	270
# of terabytes managed and distributed cumulatively **(Geography)**	C	2,887.4	3,425.3	4,255.9	3,556.6	3,840.6	4,300	4,600	+300	5,400
# of systematic analyses and investigations completed **(Total)**	A	2,127	2,157	2,879	2,530	5,513	4,436	3,007	-1,429	3,104
Total Actual/Projected Cost systematic analyses ($000) (National Average)						**1,782,711**	**811,480**	**831,890**	**+20,050**	**830,400**
Actual/Projected Cost per systematic analysis (whole dollars) (National Average)		**220,000**	**230,000**	**240,000**	**250,000**	**250,000**	**250,000**	**260,000**	**+10,000**	**280,000**
Comment	Correction: In 2008 USGS rebaselined this measure using a new system, the Information Products Data System (IPDS). The pilot is done and full implementation is underway, but definitions of categories to include are still being refined. As theses definitions weren't fully applied in 2008, the actual was reported in error and should be corrected to 4,681. The error cascades into out year targets and the corrected 2009 target should be 2,940. The 2010 target and years beyond have been adjusted to reflect the rebaseline correction. Cost per systematic analyses ranges from $100,000 – $400,000. Cost per scientific product is an average that includes the cost of writing, editing, peer review, and publication of each product, as well as the cost of the studies from which the products are derived. Reimbursements from other Federal agencies are included in the calculation.									
# of formal workshops or training provided to customers **(Total)**	A	403	313	392	195	386	269	300	+31	325
Total Actual/Projected Cost workshop ($000) (National Average)						**13,882**	**12,083**	**13,006**	**+923**	**13,802**
Actual/Projected Cost per workshop (whole dollars) (National Average)		**4,000**	**6,000**	**8,000**	**10,000**	**10,000**	**12,000**	**15,000**	**+3,000**	**20,000**
Comment	Cost per workshop is a national average for technical assistance that includes the cost of agenda development, revenue, and materials. Cost ranges from $200 to $30,000 per workshop.									
# of data standards used in implementing *The National Map* **(NGP)**	A	22	22	22	22	22	22	22	0	22

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
# of students complete degree requirements for MS, PhD, and post doctoral program under the direction and mentorship of Unit Scientists **(CRU)**	A	100	103	95	90	83	90	90	0	120
Amount of fire-related data and information available online via the NBII, to assist land managers in fire management decision making **(BIMD)**	C	1.5gb	15.42gb	23.3gb	30gb	35gb	35gb	40gb	+5gb	45gb
Comment	Measure is cumulative; target reflects normal growth.									
# of Natural History Museum specimen data records available online via the NBII, to assist researchers in identifying and addressing threats to human and animal health **(BIMD)**	C	20 million	57.6 million	59.3 million	60 million	60 million	79 million	61 million	-18 million	63 million
Comment	Much work in this area suspended in 2009 due to budget cuts. No records actually lost.									
# of NBII Clearinghouse metadata records **(BIMD)**	C	UNK	UNK	29,170	41,000	41,000	41,500	42,000	+500	43,500
Comment	Measure is cumulative; target reflects normal growth.									
Amount of invasive species data and information available online via the NBII, to assist in modeling and forecasting the spread of invasives **(BIMD)**	C	800 mb	1,127 mb	1,441 mb	1,441 mb	1,542 mb	2,400 mb	1,750 mb	-650	2,050 mb
Comment	Some work in this area slowed in 2009 due to budget cuts. No records actually lost.									
Average cost per gigabyte of data available through servers under Program control **(BIMD)**	C	$63,000	$17,155	$3,794	$3,794	$3,794	$3,794	$3,794	0	$3,794

Goal Performance Table

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Average cost per analytical result, adjusted for inflation, is stable or declining over a 5-year period **(WRD)**	A	$8.63	$8.34	$8.08	$8.64	$7.87	$8.26	$8.26	0	$8.84
Comment	The cost of each analytical result will increase by 5 percent in 2009. The National Water Quality Lab (NWQL) was forced to institute a price increase due to a unilateral increase by GSA in lease costs at the Denver Federal Center. Through efficiencies and cost containing measures the NWQL was able to contain the price increase to only 5 percent in 2009 and 2010.									
# of real-time streamgages reporting in NWIS-Web **(WRD)**	A	6,246	6,496	6,728	6,830	6,936	6,940	7,100	+160	7,200
Total Actual/Projected cost real-time streamgages ($000)		**84,321**	**87,696**	**90,828**	**95,620**	**95,200**	**95,200**	**99,400**	**+4,200**	**118,800**
Comment	The number of streamgages reporting data in real-time will be enhanced by funds received under the American Recovery and Reinvestment Act as some older radio transmitters are being replaced with high data rate radio transmitters.									
# real-time ground-water sites reporting in NWIS-Web **(WRD)**	A	796	917	983	984	1,120	1,130	1,140	+10	1,170
Comment	Exceeded 2008 target because of increased interest by partner agencies, who contributed additional funding amounts that were not anticipated when targets were set.									
# real-time water-quality sites reporting in NWIS-Web **(WRD)**	A	1,125	1,102	1,249	1,249	1,402	1,410	1,418	+8	1,442
Comment	Exceeded 2008 target because of increased interest by partner agencies, who contributed additional funding amounts that were not anticipated when targets were set.									
X% of WRD streamflow stations with 30 or more years of record **(WRD)**	C	58%	59%	59%	58% (3970/ 6830)	60%	57% (4080/ 7200)	58% (4120/ 7050)	+1%	60% (4320/ 7200)
Total Actual/Project cost streamflow stations ($000)		**48,897**	**51,597**	**53,589**	**55,580**	**59,160**	**61,200**	**61,800**	**+600**	**71,280**
Actual/Projected cost per streamflow stations (whole dollars)		**13,500**	**13,500**	**13,500**	**14,000**	**14,500**	**15,000**	**15,000**	**0**	**16,500**

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Comment	The denominator changes every year because it reflects the number of streamgages reporting in real time in NWISWeb. For this measure, the denominator changes annually because the measure represents the number of streamgages with 30 or more years of record as a percentage of the total number of streamgages in operation. Since the total number of streamgages changes each year, the denominator must change if this measure is to reflect the state of the streamgaging network accurately. Although performance decreases for NSIP in 2009, the $2M increase allows USGS to help stabilize the streamgage network. Because of budget constraints at the State and local government level, as well as other Federal agencies, the streamgage network in many States has experienced a decline in cooperator funding. This NSIP increase has provided additional funds to Water Science Centers for the operation and maintenance of threatened streamgages.									
X% of daily streamgages (streamflow stations) with data that are converted from provisional to final status within 4 months of day of collection **(WRD)**	C	10% (5/50)	20% (10/50)	24% (12/50)	29% (15/50)	28% (14/50)	29% (14/50)	32% (16/50)	+3%	35% (18/50)
Comment	The percentage is derived by dividing the numerator, which represents the number of states that successfully convert provisional data to final status within 4 months, by the denominator which is the total number of States, 50.									
# of hours for fieldwork, compilation, and publication of a typical geologic map **(NCGM)**	A	3,070	2,980	2,890	2,810	2,786	2,720	2,670	-50	2,620
# of EDMAP students trained each year **(NCGM)**	A	62	66	58	60	44	45	45	0	45
Total actual/projected cost student ($000)					**473,000**	**473,000**	**473,000**	**510,000**	**+37,000**	**510,000**
Actual/projected cost per student (whole dollars)					**7,880**	**7,880**	**7,880**	**8,500**	**+620**	**8,500**
Comment	Costs shown for the training above are obtained from grant DI-1s.									
# of digital geographic information products for priority National Park Service units that provide environmental characterization based on airborne remote sensing **(C&M)**	C	10	8	10	10	10	10	11	+1	12

End Outcome Measure / Intermediate Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Fraction of significant landfalling hurricanes (coterminous US) for which post-storm assessments of impact are developed **(C&M)**	A	3/3	¾	0/1	>=3/4	2/2	>=3/4	>=3/4	0	>=3/4
% of open Ocean and Great-Lakes shoreline of coterminous US for which up-to-date characterization of the shoreline is provided **(C&M)**	C	62%	80%	80%	90%	90%	90%	95% (5700/ 6000)	+5%	95% (5700/ 6000)
Cost of collection and processing of airborne remote sensing data for coastal characterization and impact assessments **(C&M)**	C	.56	.55	.57	.35	.50	.45	.32	-.13	.30

End Outcome Goal 2.4: Improve the understanding of Energy and Mineral Resources to Promote Responsible Use and Sustain the Nation's Dynamic Economy.

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
End Outcome Measures										
% of targeted science products that are used by partners or customers for land or resource decision making **(SP)**	A	86.5%	87.5%	99%	≥90%	95%	≥90%	≥90%	0	≥90%
Intermediate Outcome Measures and Bureau and Outcome Measures **Ensure availability of energy and mineral resource information and systematic analyses needed by land and resource mangers for informed decision making**										
# of targeted basins/areas with energy resource assessments available to support management decisions **(SP) (ERP)**	A	7	6	5	5	5	5	5	0	5

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% of targeted non-fuel mineral commodities for which up-to-date deposit models are available to support decision making **(SP) (MRP)**	C	0%	0%	0%	7%	7%	20%	53%	+33%	100%
Comment	The denominator is the total number of targeted commodities identified by internal and external experts in the rebaselining process in 2007. The 15 commodities are copper, lead, zinc, molybdenum, nickel, cobalt, chromium, beryllium, platinum-group metals, potash, rare earth elements, phosphate rock, titanium and titanium dioxide, iron ore, and gold.									
Intermediate Outcome Measures and Bureau and Outcome Measures **Ensure the quality and relevance of science information and data to support decision making**										
% of studies validated through appropriate peer review **(SP)**	A	100% (10/10)	100% (11/11)	100% (11/11)	100% (8/8)	100% (8/8)	100% (8/8)	100% (9/9)	0	100% (10/10)
% satisfaction with scientific and technical products and assistance **(SP)**	A	97.5%	97.5%	97%	≥80%	97%	≥80%	≥80%	0	≥80%
Efficiency and Other Output Measures										
# of gigabytes collected annually **(ERP)**	A	97.793	158.048	37.409	20.038	1.173	3.1189	3.3229	+0.204	3.3831
# of gigabytes managed and distributed cumulatively **(Total)**	C	367.42	525.559	563.047	561.164	564.22	567.751	573.538	+5.787	584.027
# of metadata records **(Data Preservation)**	C	UNK	UNK	UNK	UNK	UNK	New measure baseline	TBD	TBD	TBD
# of systematic analyses and investigations completed **(Total)**	A	10	11	11	8	8	8	9	+1	10
Total Actual/Projected Cost systematic analyses ($000) (ERP)		**19,110**	**9,900**	**7,800**	**13,750**	**13,750**	**13,750**	**13,750**	**0**	
Average cost of a systematic analysis or investigation **(ERP)**	A	$2.73M	$1.98M	$1.3M	$2.75M	$2.46M	$2.75M	$2.75M	0	$2.75M
Comment	2007 actual exceeded target. Target cost per systematic analysis is based on a National average that includes research in varied terrain, conditions, and geographic locations. The analyses completed in 2007 did not include extreme conditions and the cost was therefore were lower than the National average.									
Average cost of a systematic analysis or investigation **(MRP)**	A	$4.18M	$4.3M	$3.7M	$4.9M	$4.7M	$4.9M	$9.0M	+$4.1M	$5.0M

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Comment	The increased average cost estimated for 2010 results from the decrease in MRP in 2007 and the description of fixed and other costs in 2008 and 2009. These budget fluctuations have postponed the completion of two projects thereby increasing project costs and the overall average cost for 2010.									
# of formal workshops or training provided to customers **(Total)**	A	16	15	15	14	14	14	17	+3	16
Total Actual/Projected cost workshop ($000)		**120,000**	**120,000**	**120,000**	**120,000**	**120,000**	**120,000**	**120,000**	**0**	
Actual/Projected cost per workshop (whole dollars)		**15,000**	**15,000**	**15,000**	**15,000**	**15,000**	**15,000**	**15,000**	**0**	
# of mineral commodity reports available for decisions **(MRP)**	A	746	690	717	700	649	700	720	+20	720
Comment	In 2008 publication of commodity data was changed to improve cost efficiency, reducing the number of reports for the same amount of data. This change was captured in the 2008 actual but not in the 2009 target which should be 650.									

End Outcome Goal 4.2: Improve understanding, prediction, and monitoring of natural hazards to inform decisions by civil authorities and the public to plan for, manage, and mitigate the effects of hazard events on people and property.

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
End Outcome Measures										
% of communities/ Tribes using DOI science on hazard mitigation, preparedness and avoidance for each hazard management activity **(SP)**	C	45%	48%	50%	53%	53%	53%	55%	+2%	56%
% of targeted science products that are used by partners or customers for land or resource decision making **(SP)**	A	UNK	UNK	UNK	UNK	87%	≥90%	≥90%	0	≥90%

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Intermediate Outcome Measures and Bureau and Outcome Measures Provide information to assist communities in managing risks from natural hazards										
# of areas for which detailed hazard assessments are completed **(SP)**	C	UNK	49	51	53	53	55	58	+3	64
Comment	The cost per hazard assessment ranges from $100K and $1.0M. Cost is strongly dependant on complexity of the hazard accessibility of the site.									
Total Actual/Projected cost hazard assessment (whole dollars)			**600,000**	**600,000**	**600,000**	**6,000,000**	**6,000,000**	**6,000,000**	**0**	**6,000,000**
# of urban areas for which detailed earthquake hazard maps are completed **(EHP)**	A	3	3	3	4	4	4	5	+1	6
# of metropolitan regions where Shakemap is incorporated into emergency procedures **(SP) (EHP)**	A	5	5	5	5	5	5	5	0	5
# of GSN next-generation systems deployed (of 87 needed)* **(EHP)**	C					1	9	9	0	9
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
% of potentially hazardous volcanoes with published hazard assessments **(SP) (VHP)**	C	62.8% (44/70)	64.3% (45/70)	65.7% (46/70)	67.1% (47/70)	67.1% (47/70)	68.6% (48/70)	Replaced in 2009 by new measure below because redefining the measure baseline (denominator) to align with definition of moderate to very high threat volcanoes in VHP's blueprint for the future, the National Volcano Early Warning System (NVEWS; OFR 2005-1164).		
% of moderate to very high threat volcanoes with published hazard assessments (denominator reset to 101) **(SP) (VHP)**	C	UNK	UNK	UNK	UNK	UNK	47.5% (48/101)	48.5% (49/101)	+1.0%	50.5% (51/101)

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
# of monitoring and telemetry nodes upgraded (e.g., analog to digital conversion, added sensors, improved power systems, upgraded radio transmitters and receivers) **(VHP)**	A					12	13	12	-1	10
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
% of very high threat volcanoes with at optimal level monitoring (X number of 18) **(VHP)**	C					22.2%	22.2%	22.2%	0	22.2%
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
Use Rate: Landslide Hazards: # of responses to inquiries from the public, educators, and public officials to the National Landslide Information Center on hazard mitigation, preparedness and avoidance strategies for landslide hazards **(LHP)**	A	5,200	1,600	1,600	1,600	1,600	1,200	1,200	0	1,200
Comment	With the efficiency and improvement of the Landslide Hazards Program web site, more users are able to get the information that they need without making a specific inquiry.									
Intermediate Outcome Measures and Bureau and Outcome Measures **Ensure the quality and relevance of science information and data to support decision making**										
% of studies validated through appropriate peer review **(SP)**	A	100%	100%	100% (248/ 248)	100% (239/ 239)	100% (221/ 221)	100% (232/ 232)	100% (247/ 247)	0	100% (247/ 247)
% satisfaction with scientific and technical products and assistance **(SP)**	A	UNK	UNK	87%	≥80%	87%	≥80%	≥80%	0	≥80%
Efficiency and Other Output Measures										

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
# of systematic analyses and investigations completed **(Total)**	A	6	4	248	239	221	232	247	+15	247
Actual/Projected Cost per systematic analyses (whole dollars) (National Average)				**80,000**	**100,000**	**100,000**	**110,000**	**110,000**	**0**	**120,000**
Comment	The omnibus restores external grant funding and provides partial coverage of fixed costs, resulting in an increase in the expected number of systematic analyses produced in 2009. In the 2007 Plan, a new baseline was established for the systematic analyses. The decline in publications in 2008 is due to the increased level of response to eruptions of Mount St. Helens, Augustine, and Kilauea. The estimate for 2009 is based on the average rate of release for years without major hazard events. National average ranges from $20,000 to $200,000.									
Cumulative number of ANSS seismic monitoring stations **(EHP)**	C	40 cuml. 563)	27 (cuml. 723)	63 (cuml. 786	17 (cuml.803)	19 (cuml. 805)	17 (cuml. 822)	12 (cuml. 834)	+12	0 (cuml.834)
Comment	Average cost per sensor (purchase and install) varies by the type of sensor installed and its performance requirement, from $5,000 to about $75,000. For example, the 17 sensors that were purchased in 2008 -for installation in 2009- cost an average of about $50,000. The President's Tsunami Initiative, which increased funding to the program in 2005, did not include funding for new seismic stations in the U.S. Thus, the number of new stations has decreased every year as development funding dwindles (see figure at end of narrative). An exception occurred when partner contributions from the National Science Foundation in 2004 installed 95 stations well above the target. Note that significant performance improvements were realized in 2005-2006 in the GSN program from Tsunami Initiative funding in that program. In 2009, under a CR at the 2008 enacted level, the program would retain ~$0.8M of ANSS development funds, which will be used to expand the network. By 2010, under a current services budget, ANSS development funding will end, as operating costs increase for sensors and processing systems that were installed the previous year(s). This results in no new sensors targeted for 2010. An over-target request is being submitted that will allow further expansion of ANSS in BY2010 (+$3.2 million for +100 new sensors). Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
# of formal workshops or training provided to customers **(Total)**	A	19	15	14	12	19	12	13	+1	13
Total Actual/ Projected Cost workshop ($000) (VHP)		**120**	**120**	**120**	**120**	**120**	**120**	**120**	**0**	**120**
Actual/Projected Cost per workshop (whole dollars) (VHP)		**30,000**	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**	**0**	**30,000**

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Comment (Geomag)	Workshop number and costs vary from year to year depending on program objectives, partner contributions and other factors. For example, in one year, a small number of low-cost workshops may be held in another year, one or two large workshops may be held to bring multiple stakeholder groups together. Workshop costs may also span fiscal years because planning may begin 1-2 years in advance.									
# of sites (mobile or fixed) monitored for ground deformation to identify volcanic activity **(VHP)**	C	88	94	159	170	174	175	185	+10	200
# of areas in the U.S. for which models exist that are used to interpret monitoring data **(LHP)**	C	4 1/3	4 2/3	5	5 1/3	5 1/3	5 2/3	6	+1/3	7
# of volcanoes for which information supports public safety decisions **(VHP)**	C	51	51	52	52	52	52	Redefined in 2009 to align with definition of basic real time monitoring in VHP's blueprint for the future, the National Volcano Early Warning System (NVEWS; OFR 2005-1164).		
Total Actual/ Projected cost volcanoes ($000)		**2,000**	**0**	**1,000**	**0**					
Actual/Projected Costs per # volcano (whole dollars)		**1,000,000**		**1,000,000**	**800,000**	**800,000**	**800,000**	**800,000**	**0**	**800,000**
Comment	The cost depends strongly on: (1) location – whether access is by truck, helicopter, or ship + helicopter and (2) complexity of the installation- whether basic, short-period, analog seismic networks or includes digital broadband seismic, GPS, webcams, etc. Permitting on protected federal lands can also be a substantial cost.									
X% of potentially active volcanoes monitored **(VHP)**	C	72.9% (51/70)	72.9% (51/70)	74.3% (52/70)	74.3% (52/70)	74.3% (52/70)	74.3% (52/70)	Redefined in 2009 to align the numerator to basic real time monitoring and denominator to moderate to very high threat volcanoes as defined in VHP's blueprint for the future, the National Volcano Early Warning System (NVEWS; OFR 2005-1164).		
% of moderate to very high threat volcanoes with at least basic real time monitoring **(VHP)**	C	UNK	UNK	UNK	UNK	UNK	37.6% (38/101)	37.6% (38/101)	0	39.6% (40/101)
X% data availability for real-time data from the GSN **(GSN)**	A	89%	88%	87.8%	86%	87%	84%	88%	+4%	90%
Comment	Omnibus restores cuts proposed in President's request and provides an increase for upgrading stations. These increases will show improvements to 88% in current and out years.									

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Data processing and notification costs per unit volume of input data from sensors in monitoring networks (in cost per gigabyte) **(GSN)**	A	0.79 $k/GB	1.30 $k/GB	1.19 $k/GB	1.33 $k/GB	0.89 $k/GB	1.33 $k/GB	1.30 $k/GB	-0.03 $k/GB	1.20 $k/GB
Comment	Omnibus restores cuts proposed in President's request and provided increase that will improve performance and decrease unit cost to $1.30 $k/GB in 2009 relative to original target.									

End Outcome Goal 5.1: Increase Accountability

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
End Outcome Measures										
Obtain unqualified audit **(SP)**	A	Unqualified Opinion	Unqualified Opinion	Unqualified Opinion	Unqualified Opinion	Unqualified Opinion	Unqualified Opinion	Unqualified Opinion	--	Unqualified Opinion
Establish and maintain an effective, risk-based internal control environment as defined by the Federal Manager's Financial Integrity Act (FMFIA) and revised OMB Circular A-123 **(SP)**	A	100%	100%	100%	100%	100%	100%	100%	0	100%
Intermediate Outcome Measures and Bureau and Outcome Measures Improved Financial Management										
Corrective actions: Percent of material weaknesses, and material non-compliance issues that are corrected on schedule **(SP)**	A	UNK	UNK	UNK	UNK	UNK	100%	100%	0	100%

Goal Performance Table

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Corrective Actions: Percent of established targets in Financial Performance Metrics met as defined in FAM No. 2003-015. **(SP)**	A	100%	100%	100%	100%	100%	100%	100%	0	100%

End Outcome Goal 5.2: Advance Modernization/Integration

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
End Outcome Measures										
Percent of systems and lines of business/ functional areas associated with an approved blueprint that are managed consistent with that blueprint **(SP)**	A	UNK	UNK	UNK	UNK	100%	100%	100%	0	100%
Percent of IT systems that have Certification and Accreditation (C&A) and are maintaining C&A status **(SP) (EIS&T)**	A	100%	100%	100%	100%	100%	100%	100%	0	100%
Comment	USGS has 12 major systems and all have undergone and are maintaining their C&A status.									
Intermediate Outcome Measures and Bureau and Outcome Measures E-Government and Information Technology Management										
Efficient IT Management: Score achieved on the OMB Enterprise Architecture Framework **(SP) (EIS&T)**	A	Level 4	Level 3	Level 4 – complete Level 3 – Use and Results	Level 4	Level 4 on "Completion" "Use," and "Results" categories	Level 4 in all areas	Level 4 in all areas	0	Level 4 in all areas

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Comment	The Enterprise Architecture (EA) framework measures maturity on a scale of 1-5 in the following areas: completion, use, and results. 2008 scoring achieved: Bureau-level EA program actively contributes towards DOI achieving a score of 4 in the "Completion" section and 4 in both the "Use" and "Results" in support of OMB EA Maturity Framework 2.2, PMA Scorecard, and OMB's Proud to Be.									
Efficient IT Management: Stage achieved on the GAO IT Investment Management Framework **(SP) (EIS&T)**	A	100% stage 3	63% stage 3	70% stage 3	74% stage 3	100% stage 3	100% stage 3	100% stage 3	0	100% stage 3
Comment	The GAO's ITIM framework is a maturity model composed of 5 progressive stages of maturity that an agency can achieve in its IT investment management capabilities. For each maturity stage, the ITIM describes a set of critical processes/key practices that must be in place for the agency to achieve that stage. The ITIM is used to analyze a USGS investment management process and to determine its level of maturity. Evaluation of maturity is performed by capturing the status of implementation of the key practices across the 5 maturity stages. The status data includes (a) rating (executed, partially executed, not executed, N/A); (b) summary of evidence/comments; (c) point of contact. If the key practice has not been met, information required to evaluate progress toward execution of the key practice is captured, including (a) gap assessment, (b) planned actions; (c) responsibility; and (d) planned date.									
Efficient IT Management: Score achieved on the NIST Federal IT Security Assessment Framework **(SP) (EIS&T)**	A	4.5	3.37	3.5	4.5	3.99	5.0	5.0	0	5.0
Comment	The goal in 2009 is to make further progress in achieving a strong, secure NIST framework. . The Annual Internal Control Review (ICR) assessments follow NIST Special Publication 800-53A security control procedures. 800-53A, "Guide for Assessing the Security Controls in Federal Information Systems," is a companion guideline to NIST SP 800-53, "Minimum Security Controls for Federal Information Systems." Each NIST publication provides guidance for implementing the steps in the NIST Risk Management Framework. Results from the ICR assessments define the level of security control maturity as identified in the NIST Federal IT Security Assessment Framework. NIST level 1 is whether a policy is in place; level 2 is whether procedures to implement the policy are in place; level 3 is whether the policy and procedures are implemented and actually used; level 4 is whether the security controls are tested or scanned or if a contingency plan is in place; level 5 is whether all systems are fully integrated. All 12 USGS systems were assessed using the ICR template provided by DOI which contained a roll-up process to determine the level of maturity by system. Results were aggregated to determine average percentage score.									
Implement Records Management Strategy: % of all bureaus and offices developing consistent records management policy **(SP) (EIR)**	A	100%	100%	100%	100%	100%	100%	100%	0	100%

Goal Performance Table

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
IT Investment Management Annual % of USGS IT investments reviewed, approved, and monitored through the CPIC process. **(EIS&T)**	A	100%	100%	100%	100%	100%	100%	100%	0	100%
Comment	USGS has 7 IT investments and manages 2 DOI investments (Geospatial Line of Business and Geospatial One-Stop).									
% of earth science instructors in the U.S., K-16, using USGS educational materials **(EIR)**	A	UNK	UNK	UNK	UNK	Baseline	K-12 = 32%; Levels 13-16 = 78%	K-12 = 32%; Levels 13-16 = 78%	0	K-12 = 32%; Levels 13-16 = 78%
% of customers satisfied with service from USGS IT Service Desk **(EIS&T)**	A	95.9%	94%	95.9%	94% 4559/ 4850)	96.7%	94% 4559/ 4850)	94% 4559/ 4850)	0	94% 4559/ 4850)
Comment	USGS Service Desk users are randomly sampled whenever a service is requested. The numerator is the number of responses that indicate positive satisfaction; the denominator is the total number of surveys returned.									
% of identified USGS security incidents that receive corrective action within timeframes required by the DOI Incident Response Policy **(EIS&T)**	A	50%	75%	95%	100%	86%	100%	100%	0	100%
Total USGS public web content managed by the enterprise web infrastructure **(EIR)**	A	UNK	UNK	UNK	UNK	UNK	Baseline	TBD	0	TBD
Comment	In 2009 the USGS is working on a methodology for the Baseline.									
Total # of internships and fellowships supported and/or facilitated by the USGS educational program **(EIR)**	A	55	55	70	55	55	55	175	+120	175
Efficiency and Other Output Measures										
# of new and legacy information products added to the USGS publications database **(EIR)**	C	67,500	70,351	71,717	67,500	44,502	67,500	67,500	0	67,500

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Comment	All of the products counted are official USGS publications. The USGS estimates that 67,500 will be added each year through 2010. Per the USGS Survey Manual chapter SM 1100.1, a USGS information product is "the compilation of scientific communication or knowledge such as facts, data, or interpretations in any medium (e.g., print, digital, Web) or form, including textual, numerical, graphical, cartographic, or audiovisual, to be disseminated to a defined audience or customer, scientific or nonscientific, internal or external." Legacy products are those created in the past, and not currently in electronic format. To add these to the database, they must be scanned, converted to a machine-manipulative form, and then entered.									
# of online bibliographic records **(EIR)**	A	3,872	6,381	4,992	6,381	2,444	6,381	6,381	0	6,381
Comment	The USGS estimates that 6,381 records will be added each year through 2010.									
Intermediate Outcome Measures and Bureau and Outcome Measures Human Capital Management										
Worker Competency: % of employees who have resolved competency gaps in specified occupational groups identified as critical occupations in the Department **(SP)**	C	65%	77%	77%	79%	75%	75%	76%	+1%	79%
Comment	The results of the 2008 Federal Human Capital Survey indicated that USGS employees have the right skills and abilities to accomplish the mission of the organization.									
Diversity: The % of managers who have completed the 4-hour required minimum annual diversity/EEO training	A	UNK	UNK	39.2%	30%	78%	30%	85%	+5%	95%
Comment	In 2008, 78 percent of USGS managers completed EEO/Diversity training. The 78 percent actual far exceeded the goal of 30 percent set for 2008. Given the marked improvement and the fact that this year the USGS is making more EEO/Diversity training available to managers, the USGS has raised its 2009 target to 80 percent for 2009. Based on this, the USGS expects to continue improving in this area through 2013.									
Diversity: The # of MD-715 identified deficiencies that have been corrected	A	UNK	UNK	3	3	3	1	1	0	1
Collaboration Capacity: # of volunteer hours per year supporting DOI mission activities **(SP)**	A	UNK	UNK	138,761	200,000	143,792	144,000	Rebaseline	--	Rebaseline
Comment	The USGS is currently rebaselining this measure based on new reporting capabilities being put in place.									

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Cooperative Conservation Internal Capacity: # of employees trained in collaboration and partnering competencies	C	UNK	UNK	150 FTE	4,339 FTE	4,106 FTE	*4,500 FTE	4,000 FTE	-500	4,500
Comment	*The USGS target assumed employees viewing the Department's "Together We Can" video and recording their training in DOI LEARN. For USGS, DOILEARN recorded only 5 employees viewing the video due to a number of hosting and DOILEARN interface issues. The number that actually viewed the video in various venues could be greater, but we have no proof in the required system (DOI LEARN).									
Cooperative Conservation Internal Capacity: % of organizations that have trained and developed employees in collaboration and partnering competencies **(SP)**	C	UNK	UNK	41%	50%	46%	*60%	60%	0%	53%
Cooperative Conservation External Capacity: # of conservation projects that actively involve the use of knowledge and skills of people in the area, and local resources in priority setting, planning, and implementation processes **(SP)**	A	UNK	UNK	90	92	91	92	96	+4	100
Intermediate Outcome Measures and Bureau and Outcome Measures Organizational Reviews and Acquisitions										
Increase Competition: Percentage of eligible service contract actions over $25,000 awarded as performance-based acquisitions **(SP)**	A	48%	25%	50%	50%	57.1%	50%	50%	0	50%
Intermediate Outcome Measures and Bureau and Outcome Measures Performance-Budget Information										

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
% of programs with demonstrated use of performance measures in budget justifications and decisions **(SP)**	A	UNK	UNK	100%	100%	100%	100%	100%	0	100%
% of programs that can estimate marginal cost of changing of performance **(SP)**	A	UNK	UNK	100%	100%	100%	100%	100%	0	100%
Intermediate Outcome Measures and Bureau and Outcome Measures Facilities Improvement										
Overall condition of buildings and of structures (as measured by the FCI) that are mission critical and mission dependent (as measured by the API), with emphasis on improving the condition of assets with critical health and safety needs **(SP)**	A	UNK	0.150	0.124	0.133	0.128 65,300/ 510,141	0.133 (67,247/ 509,616)	0.115 (58,612/ 510,141)	-0.009	0.107 54,338/ 510,141
Comment	Performance will be impacted by ARRA funding. See the performance measures in the Program Plan behind the ARRA tab in the back of the budget.									
Percent change in the Operating Costs (operations and maintenance costs) per square foot of buildings that are "Not-Mission Dependent" as reported in the Federal Real Property Profile (FRPP) in the current fiscal year compared to the previous fiscal year. **(SP)**	A	UNK	$3.15sf 0%	$3.03sf -1.6%	$2.94sf -3%	$2.94sf -3%	$ 2.38sf 31%	$2.33sf 3%	$2.26sf -3%	-$2.07sf -3%

Goal Performance Table

End Outcome Measure / Intermediate or PART Measure	Type	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2008 Actual	2009 Plan	2010 President's Request	Change from 2009 Plan to 2010	Long-term Target 2013
Percent change in the total number of buildings (office, warehouse, laboratory, and housing) reported as "Under Utilized" or "Not Utilized" in the Federal Real Property Profile (FRPP) in the current fiscal year compared to the previous fiscal year **(SP)**	A	UNK	UNK	83%	-5%	-5%	-7.9	-5%	-5%	-5%
Percent of assets targeted for disposal that were disposed **(SP)**	A	UNK	26%	100%	50% (8/19)	11.7% (17/2)	24% (25/6)	42% (19/8)	-24%	42% (12/5)
PART Efficiency and Other Output Measures										
# of bureau condition assessments in progress or completed (within a 5-year cycle **(Facilities)**	C	9	9	14	23	+10 Cuml 33	+9 Cuml 42	+6 Cuml 6	-3	+25 Cuml 31
# of deferred maintenance and capital improvements (cumulative) **(Facilities)**	C	80	63	70	80	76	87	123	+36	185

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